

Group Discussion: MoM and Scenarios

23 April 2002

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 00 DEC 2003		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE Group Discussion on "MoM and Scenarios"				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) TNO-FEL TNO Physics and Electronics Laboratory P.O. Box 96864 2509 JG The Hague THE NETHERLANDS				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES See also ADM001657., The original document contains color images.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 20	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Goals of group discussion

- Elicit how the draft CoBP might be
 - Added to
 - Subtracted from
 - Modified
- Identify steps that might be taken to further illuminate or clarify the subject
- Identify key issues that might be the subject of future SAS panels

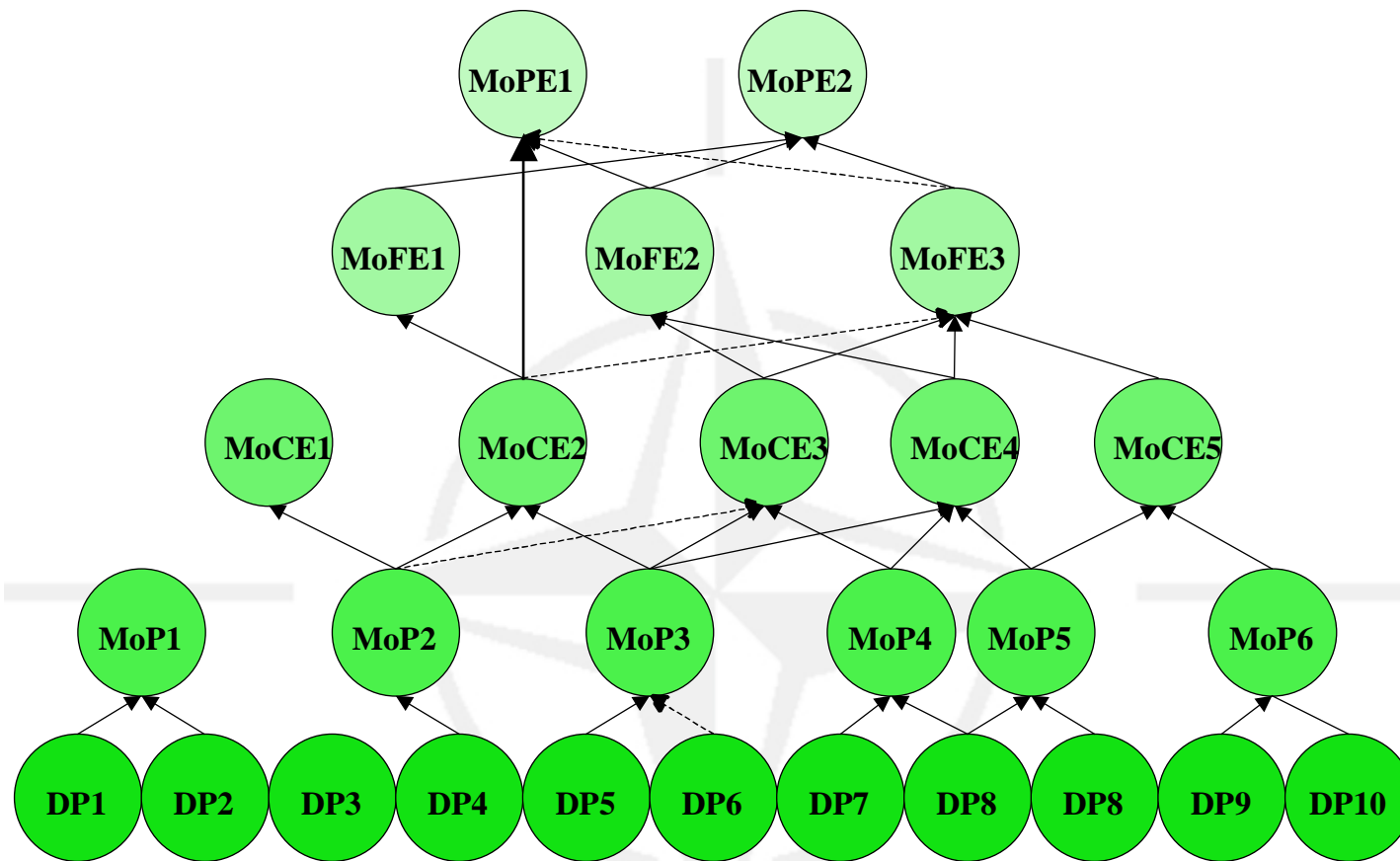
Measures of Merit (MoM)



Five levels of MoM

- MoPE: Measures of Policy Effectiveness
- MoFE: Measures of Force Effectiveness
- MoCE: Measures of C2 Effectiveness
- MoP: Measures of Performance
- DP: Dimensional Parameters

Linked MoMs



Can relationships be established?

MoM Characteristics

MoM	Focus	Scenario	Effort Required	Number	Impact	Compre- hension	Generaliz- ability
MoPE	Outcome	Dependent	High	Few	High	Policy	Low
MoFE	Mission	↕	↕	↕	↕	↕	↕
MoCE	C3I						
MoP	Systems						
DP	Process	Independent	Low	Many	Limited	Technical	High

Agree or disagree?

Conclusions

- No single measure or methodology exists for assessing overall effectiveness of C&C
- A multi-method, multi-phase approach is necessary

Agree or disagree?

Recommendations

- Plan with clear objectives
- State assumptions, constraints
- Formally assess reliability and validity
- Concentrate on MoCE and MoP
- Incorporate MoM data gathering into system design
- Include Subject Matter Experts in assessments
- Retain data as benchmarks for future comparison

Agree or disagree?

Challenges / Issues

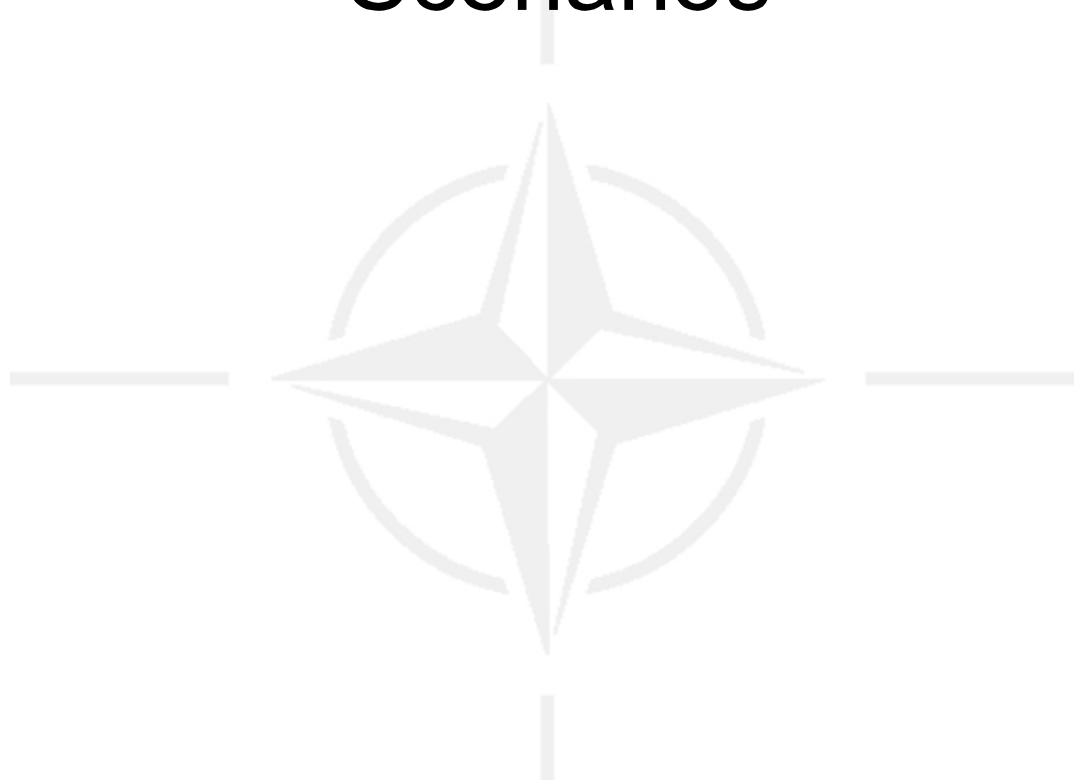
- Linkage of DP-MoP-MoCE-MoFE
- Interpretation of measures
- Environmental components
- Reliability and validity
- Uncertainties - scenario, model, outcomes
- Human-in-the-loop
- Cost and convenience
- Modelling

Comments?

Summary MoM

- Comments?
- Questions?
- Areas of concern?

Scenarios



Four elements

- (geopolitical) context
- participants
- environment
- evolution of events in time

Any other?

Six prerequisites should be met

It should:

- be approved for the assessment
- reflect the factors that have significant impact on C2 needs
- stress C2 issues
- be military credible
- be credible in terms of civil-military objectives
- facilitate the design process

Necessary and sufficient?

Three C2 elements should be reflected

- C2 organisation and infrastructure, *including human issues*
- C2 processes
- C2 systems

Complete?

Conclusions

- The ideal OA is scenario independent.
- In practice, this is rarely the case
- Problem dictates the contents of a scenario
- There is no universal scenario
- Scenario is part of a larger methodology
- No single scenario is sufficient

Comments?

Recommendations

- Organise set of scenarios/vignettes to cover problem
- create national base of approved scenarios
- explicitly identify scenarios prior to study
- information and hypotheses on threats, adversary forces and non-combatants should be addressed.
- Explicitly identify the C2 aspects under consideration
- Identify and document key scenario assumptions

Comments?

Challenges

- Standards for judging applicability and accreditation
- Scenario's for coalition C2 assessment to be developed by team of participating nations

Comments?

Summary Scenarios

- Comments?
- Questions?
- Areas of concern?

Group Discussion on “MoM and Scenarios”

M. Spaans

TNO-FEL

TNO Physics and Electronics Laboratory

P.O. Box 96864

2509 JG The Hague

THE NETHERLANDS

Spaans@fel.tno.nl

*This paper was received as a PowerPoint
presentation without supporting text.*

This page has been deliberately left blank

Page intentionnellement blanche